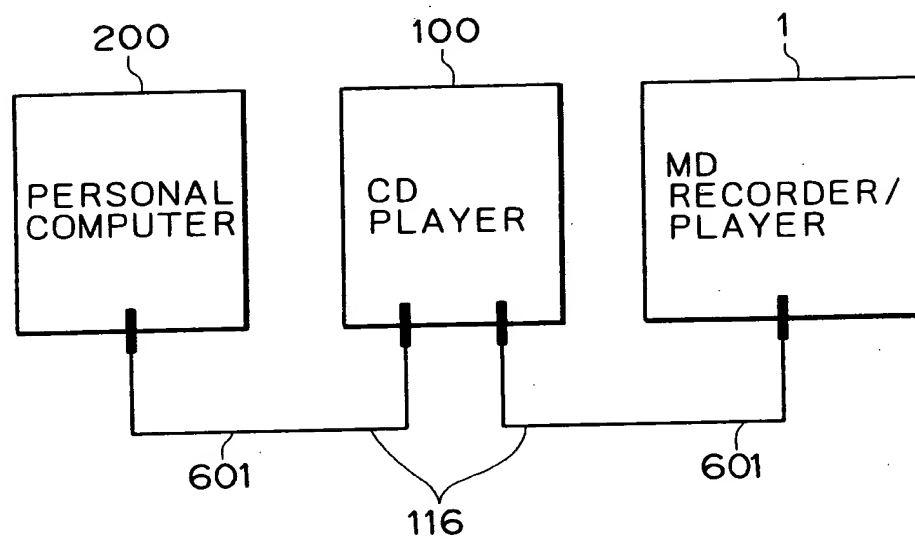


FIG. 1



# FIG. 2

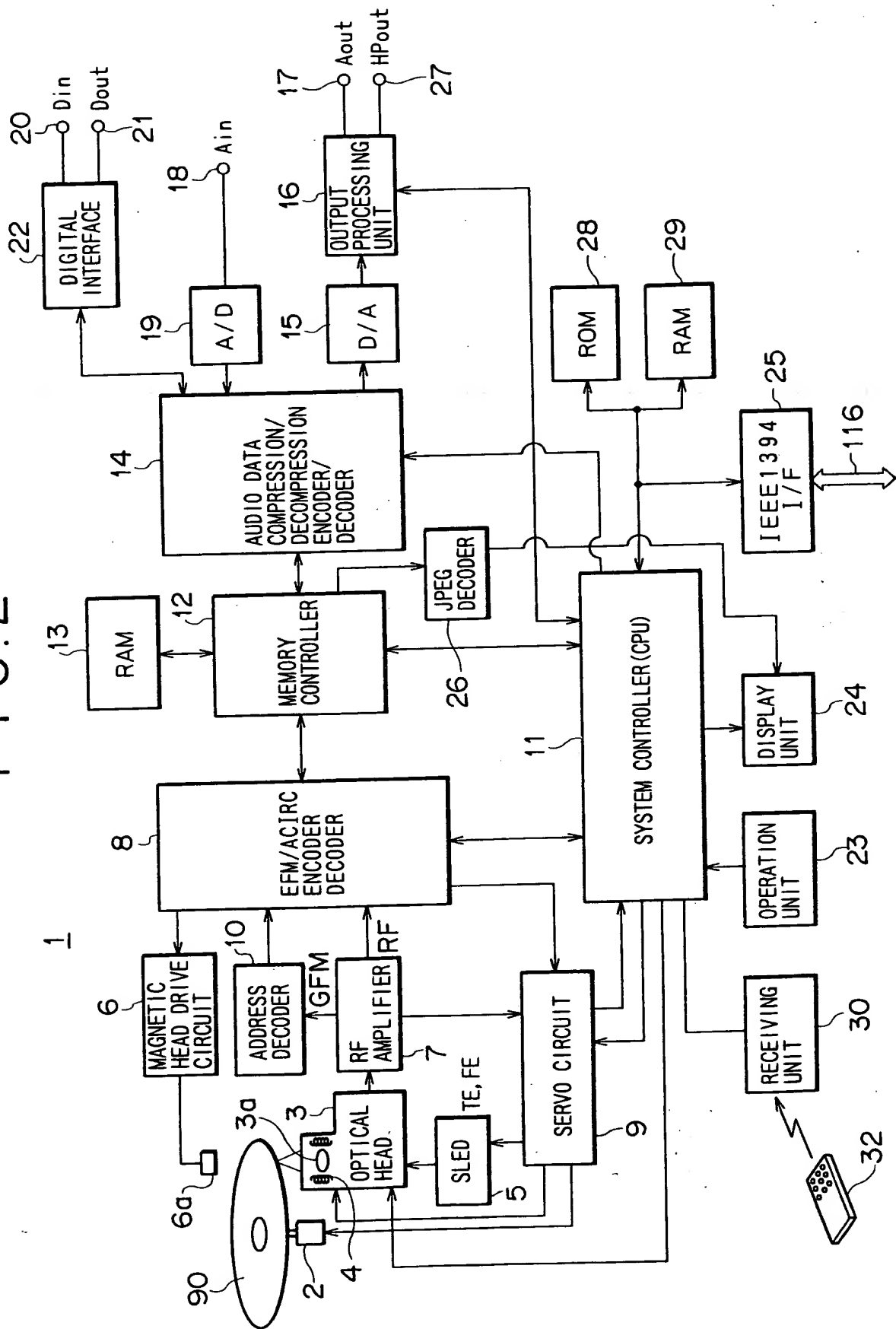


FIG. 3

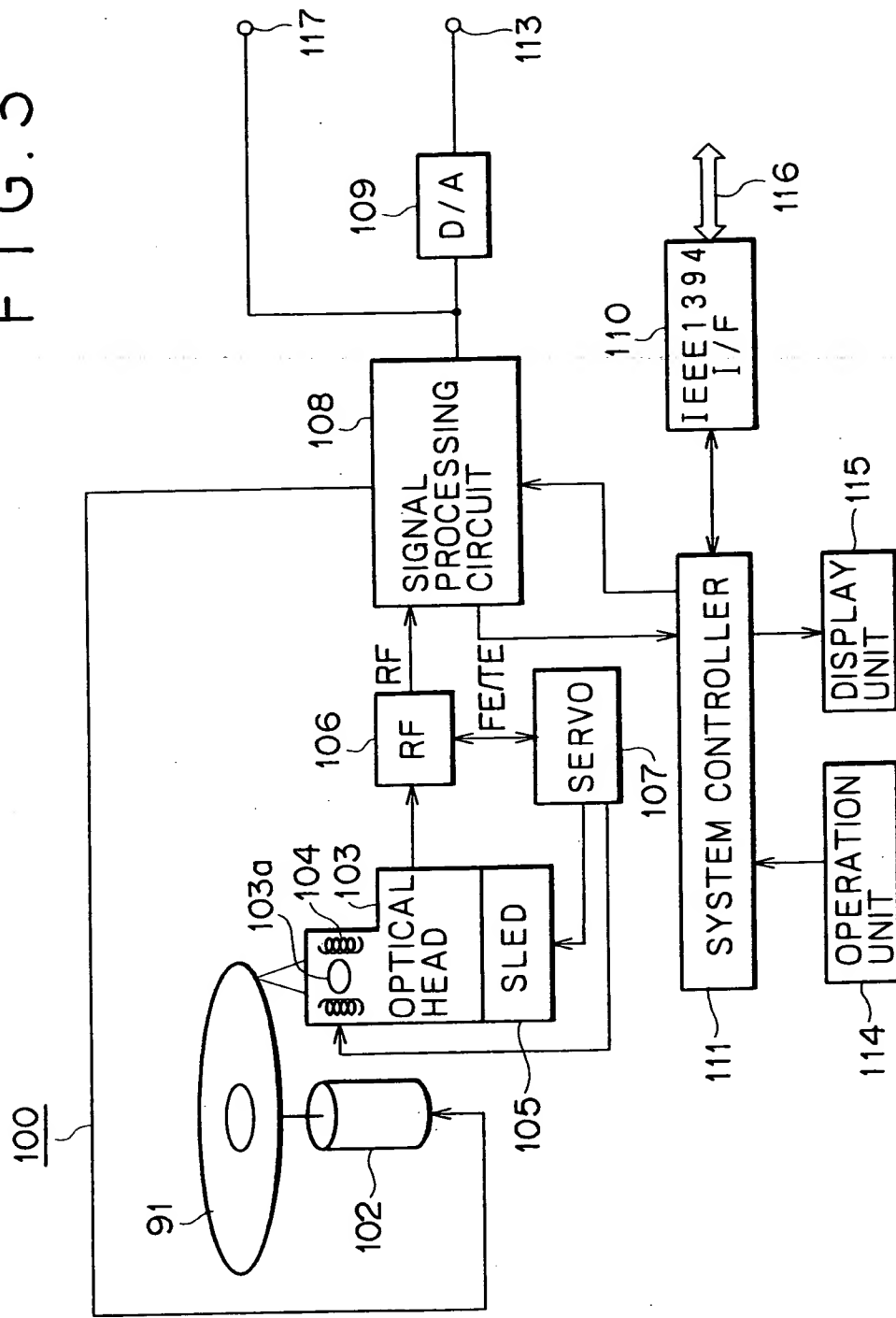
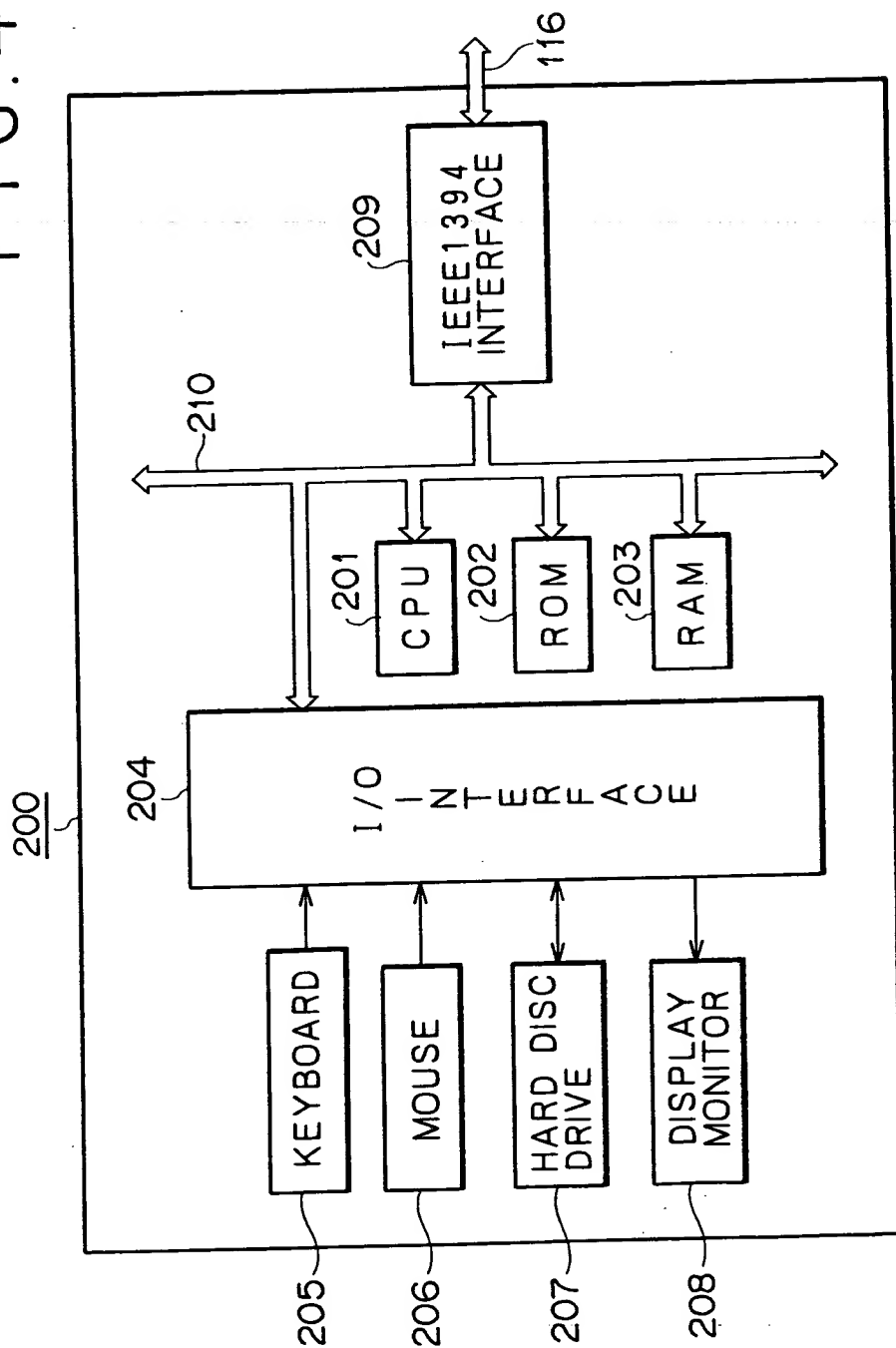
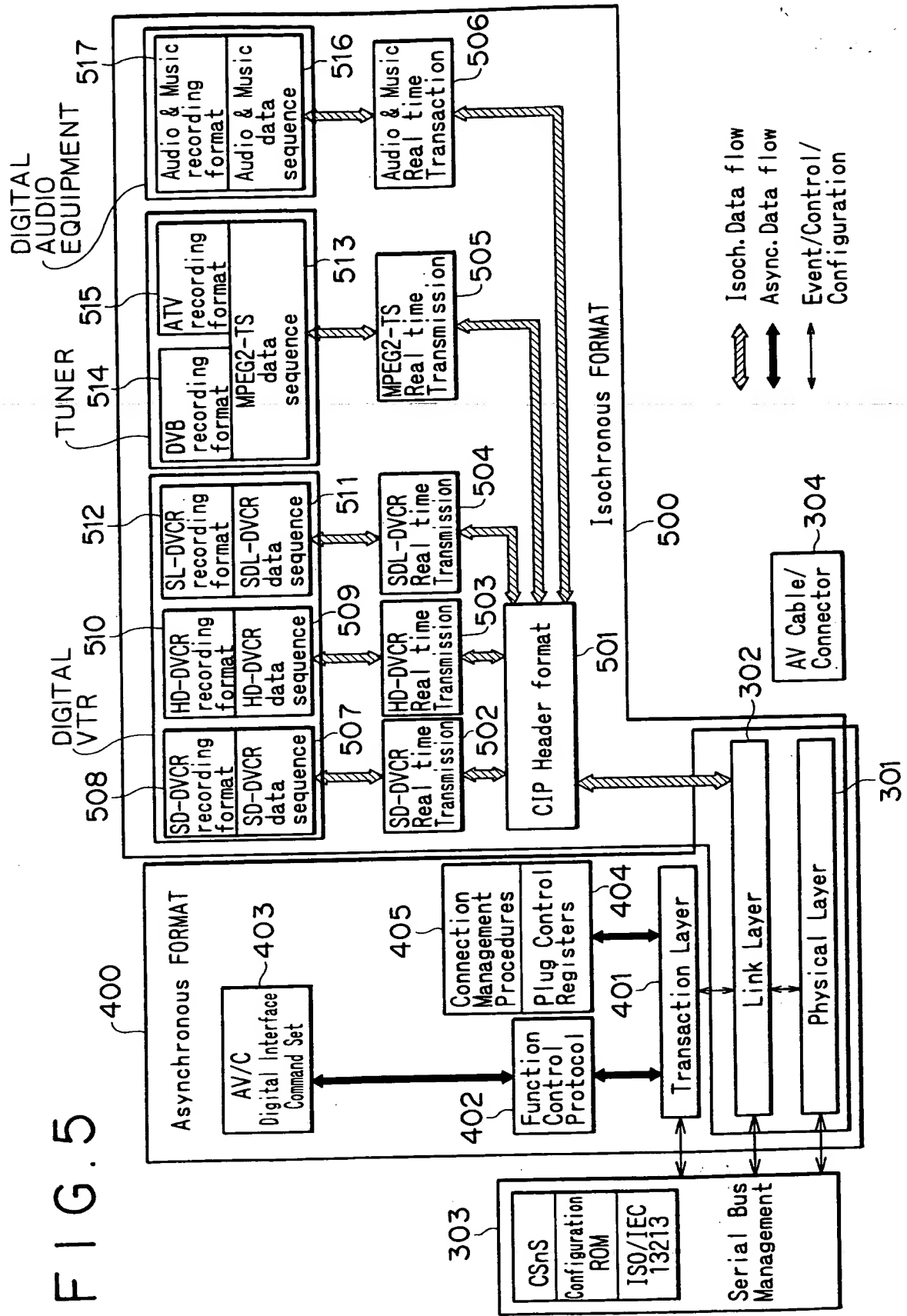


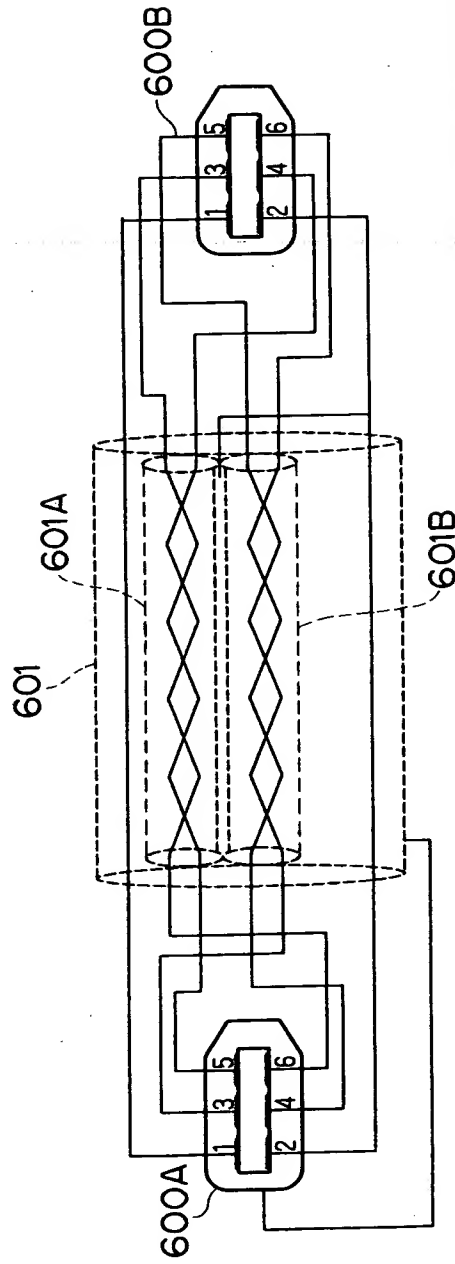
FIG. 4



# FIG. 5



# FIG. 6



PIN NO.	SIGNAL	PIN NO.	SIGNAL
1	VP (POWER SUPPLY)	1	VP
2	VG (GROUND)	2	VG
3	TPB1	3	TPB1
4	TPB2	4	TPB2
5	TPA1	5	TPA1
6	TPA2	6	TPA2

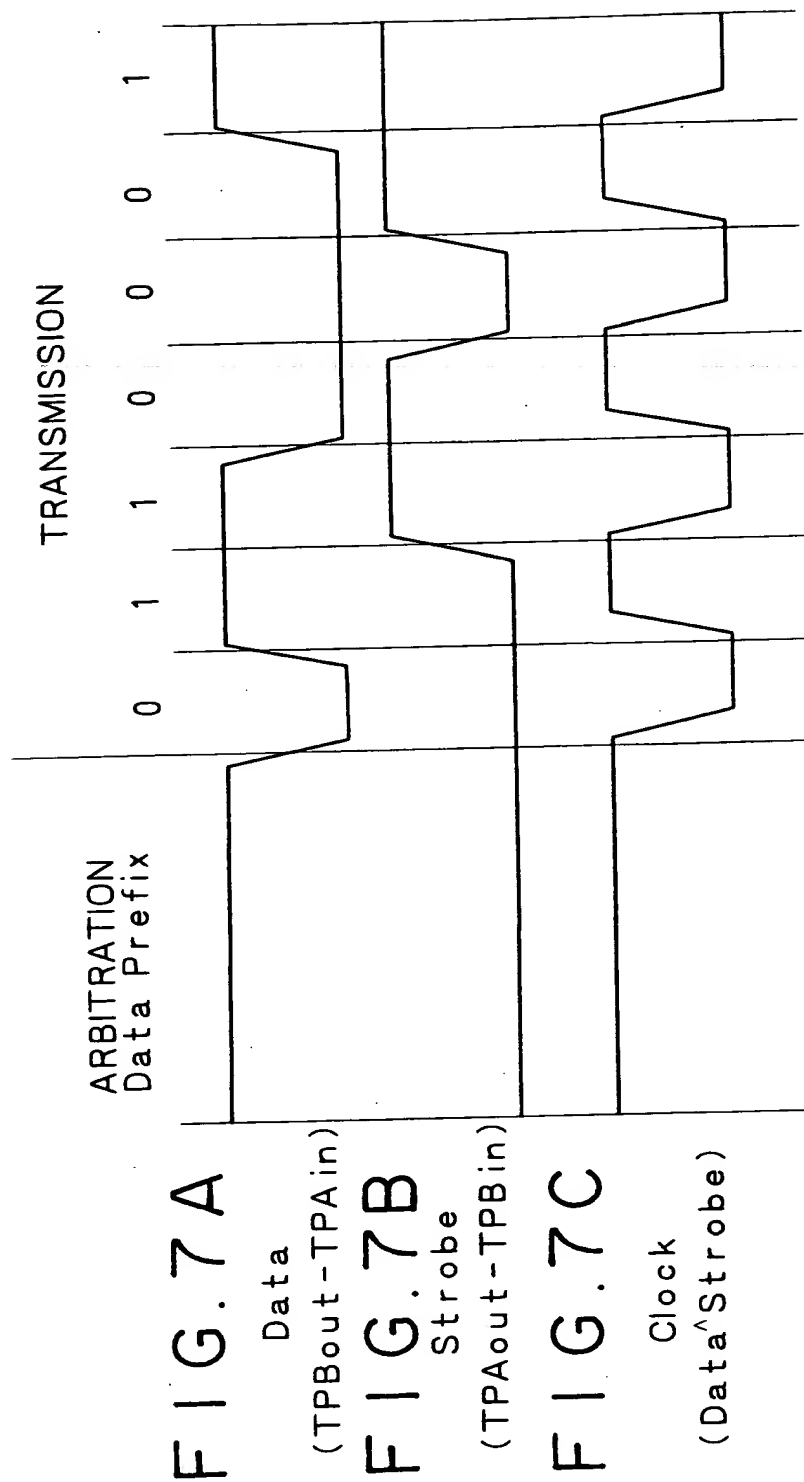


FIG. 7A

Data  
(TPBout-TPAin)

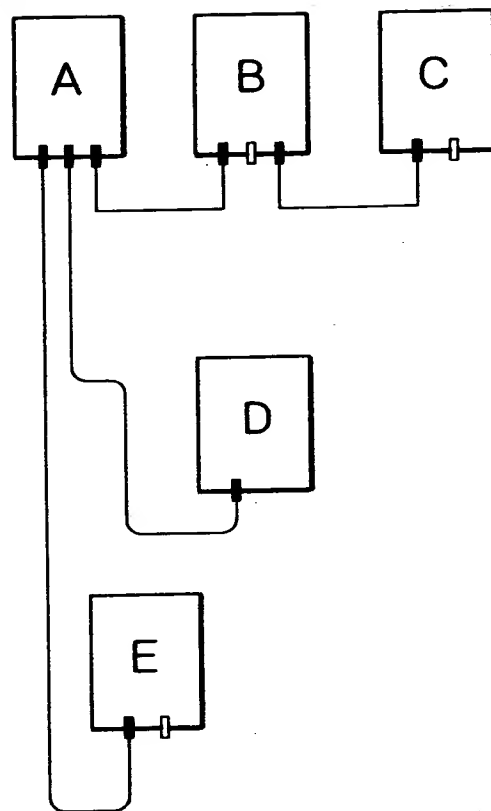
FIG. 7B

Strobe  
(TPAout-TPBin)

FIG. 7C

Clock  
(Data<sup>^</sup>Strobe)

FIG. 8



IEEE1394 BUS CONNECTION



FIG. 9A

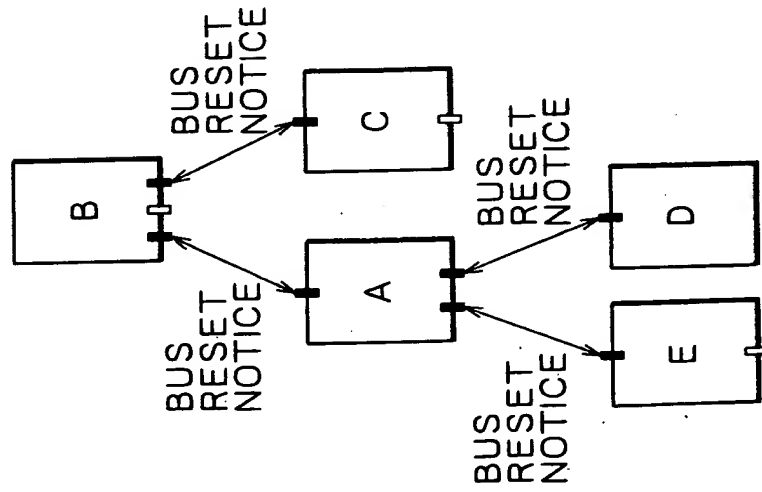


FIG. 9B

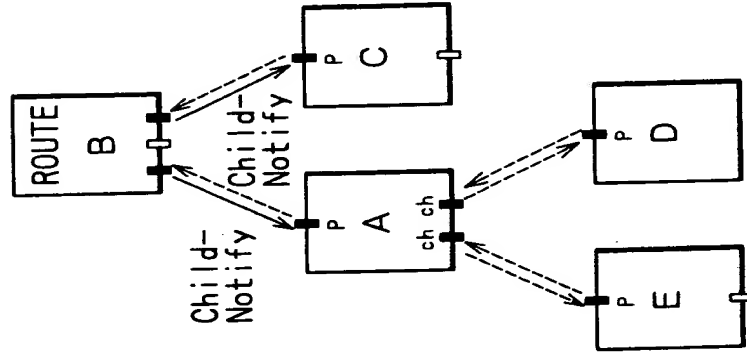
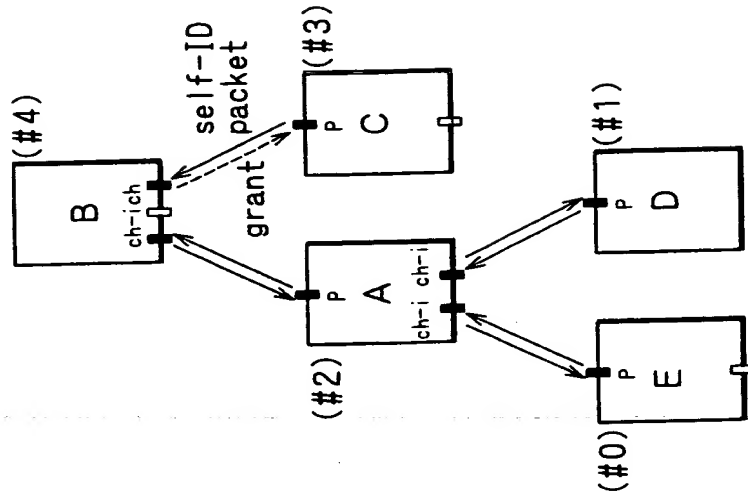
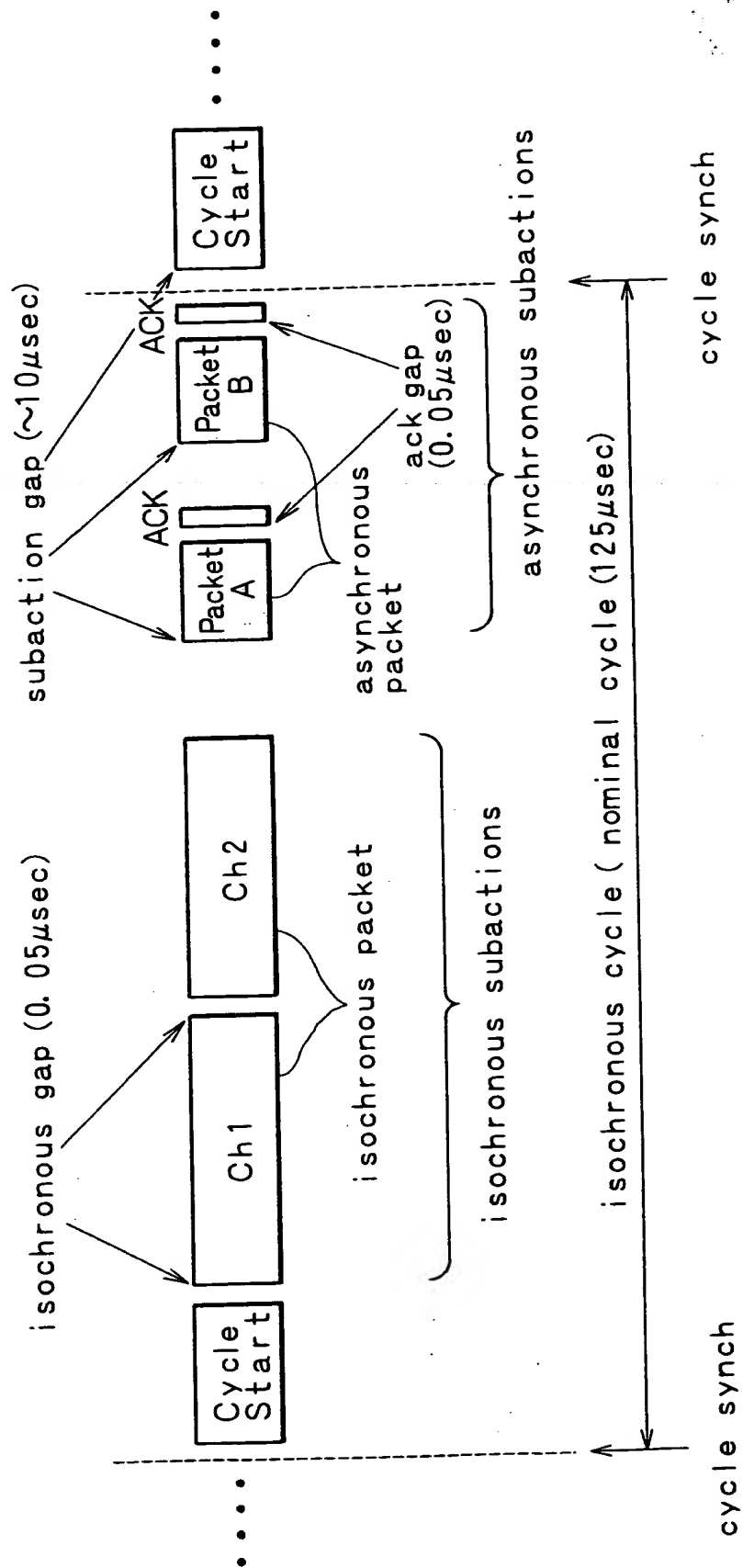


FIG. 9C

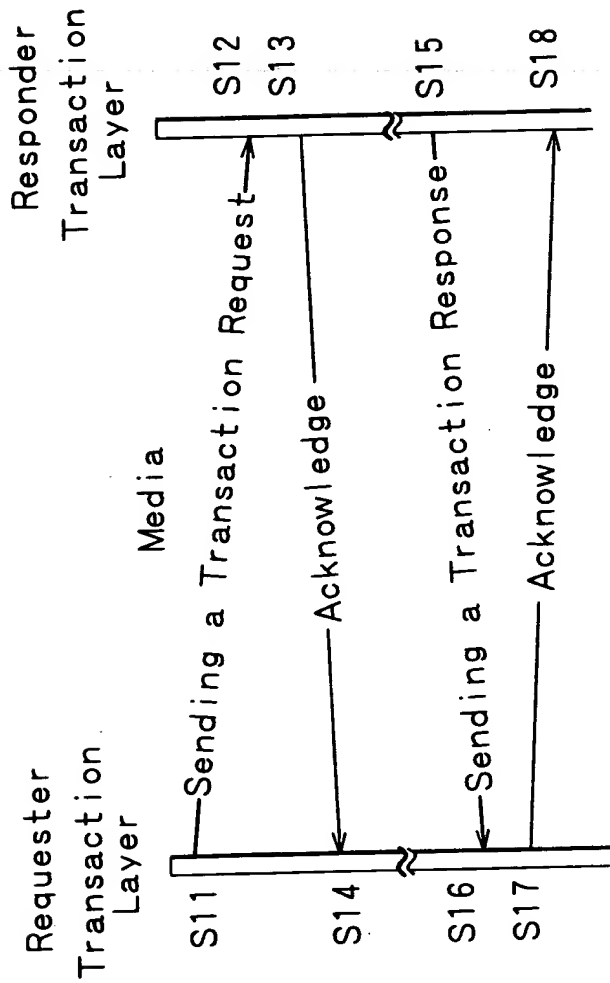


Bus Reset	Tree-ID Identify	Self-ID Identify
-----------	------------------	------------------

# FIG. 10



# FIG.11A



# FIG.11B

Sending a Transaction Request	Sending a Transaction Response
Write Request (data quadlet)	Write Response
Write Request (data block: data length=4byte)	No Response (Unified Transaction)
Write Request (data block: data length≠4byte)	Read Response (data quadlet)
Read Request (data quadlet)	Read Response (data block)
Read Request (data block: data length=4byte)	
Read Request (data block: data length≠4byte)	Lock Response
Lock Request	

FIG. 12B FIG. 12C FIG. 12D FIG. 12E

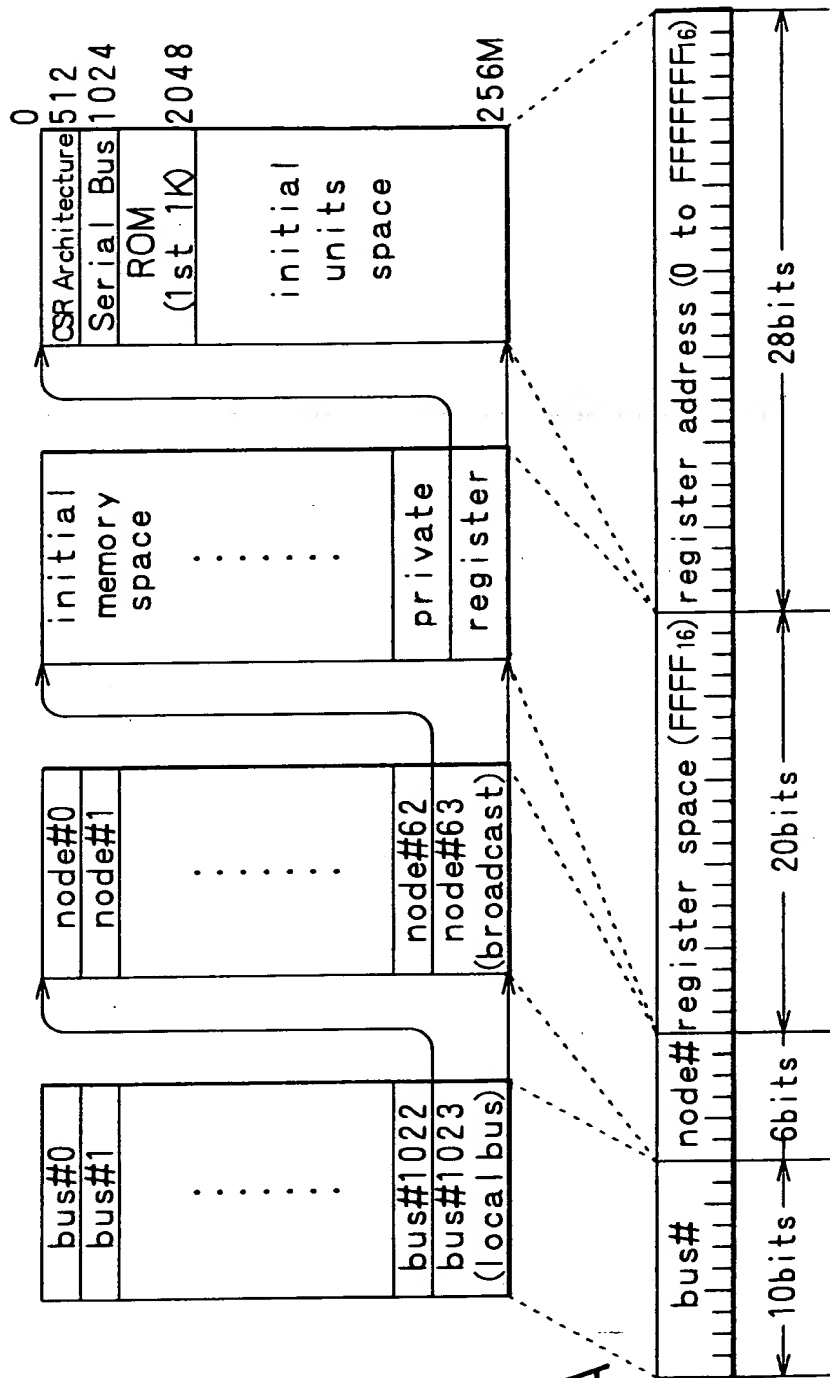
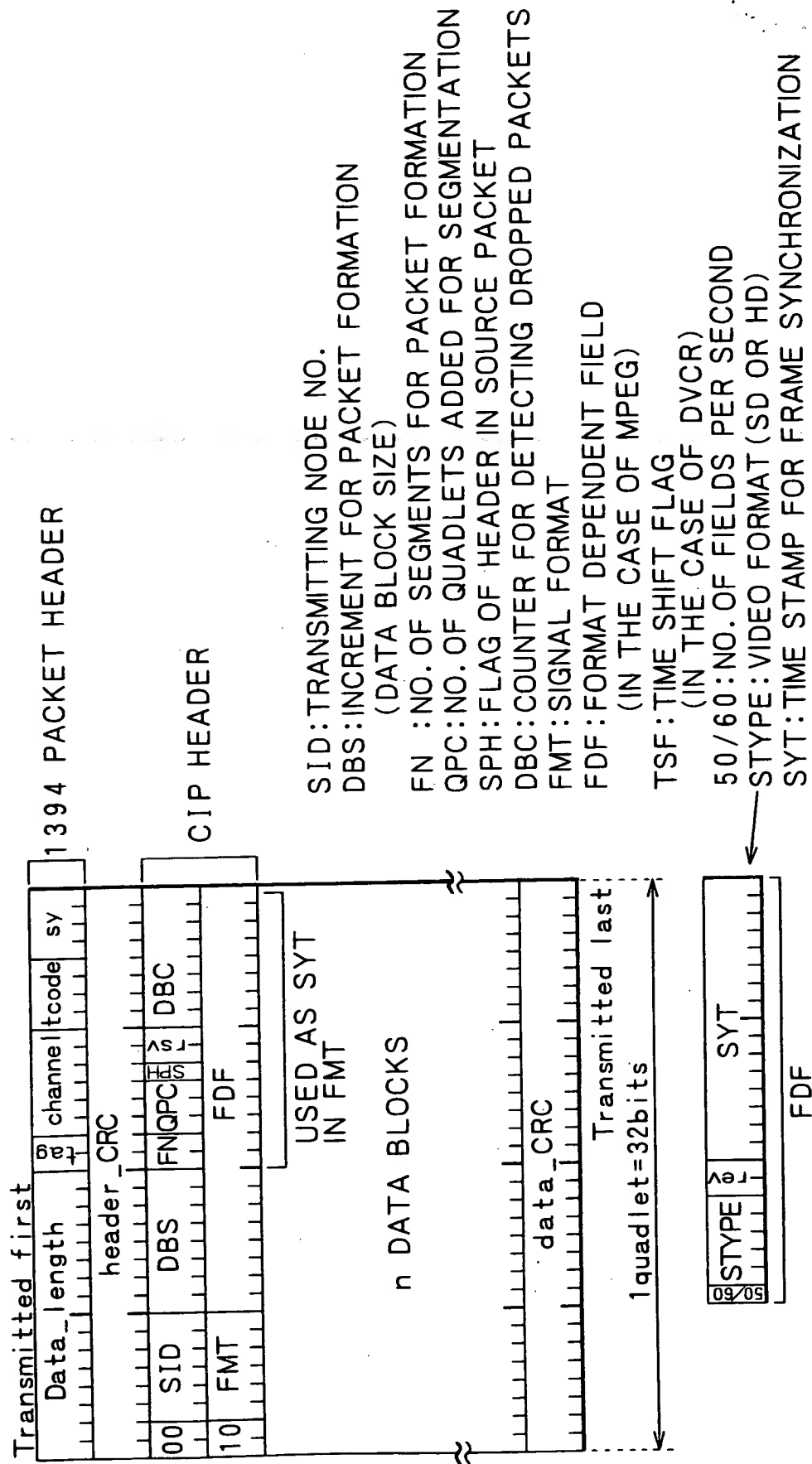


FIG. 12A

register:

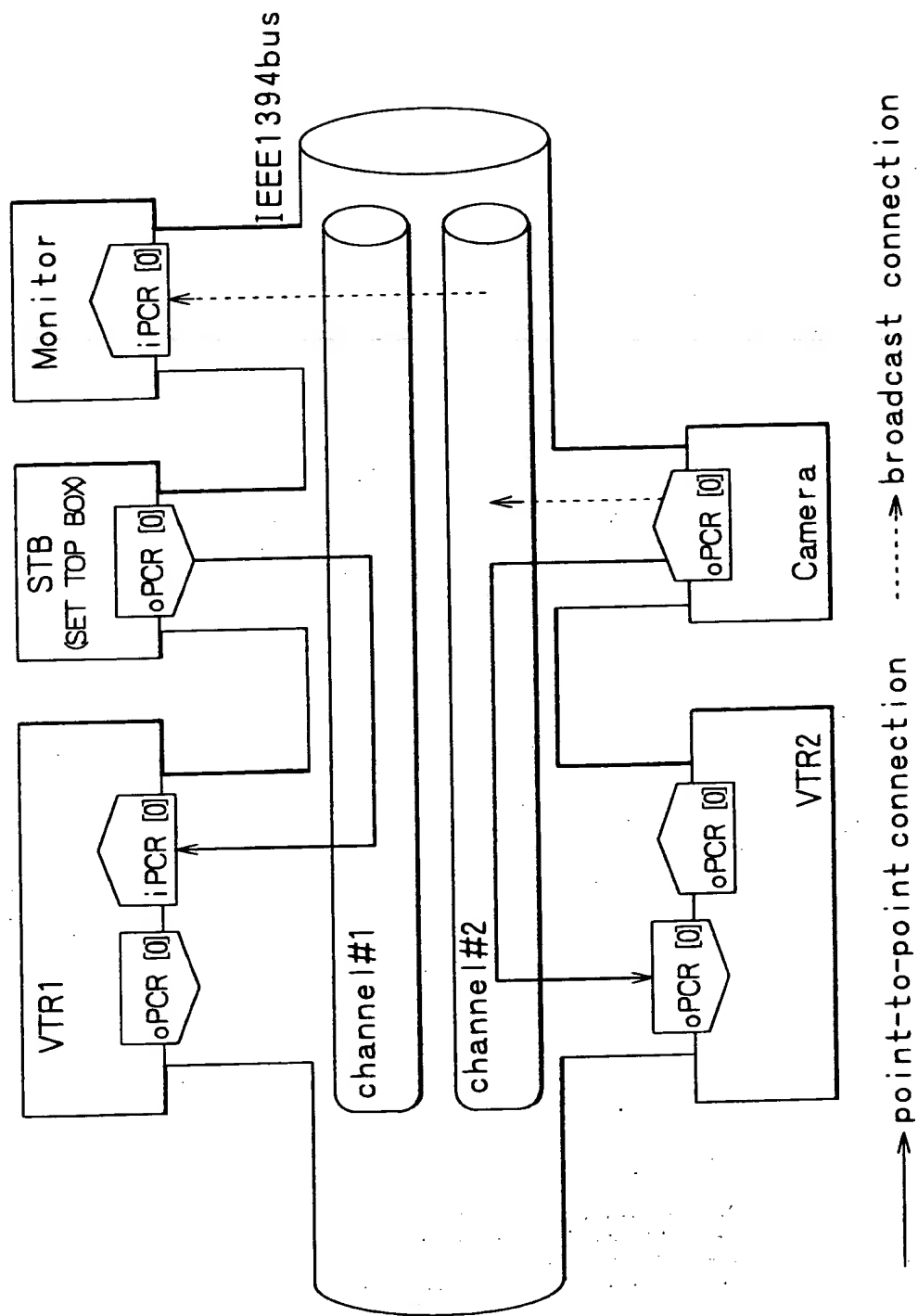
MSB

# FIG.13



SID: TRANSMITTING NODE NO.  
 DBS: INCREMENT FOR PACKET FORMATION  
 (DATA BLOCK SIZE)  
 FN : NO. OF SEGMENTS FOR PACKET FORMATION  
 QPC: NO. OF QUADLETS ADDED FOR SEGMENTATION  
 SPH: FLAG OF HEADER IN SOURCE PACKET  
 DBC: COUNTER FOR DETECTING DROPPED PACKETS  
 FMT: SIGNAL FORMAT  
 FDF: FORMAT DEPENDENT FIELD  
 (IN THE CASE OF MPEG)  
 TSF: TIME SHIFT FLAG  
 (IN THE CASE OF DVCR)  
 50/60: NO. OF FIELDS PER SECOND  
 STYPE: VIDEO FORMAT (SD OR HD)  
 SYT: TIME STAMP FOR FRAME SYNCHRONIZATION

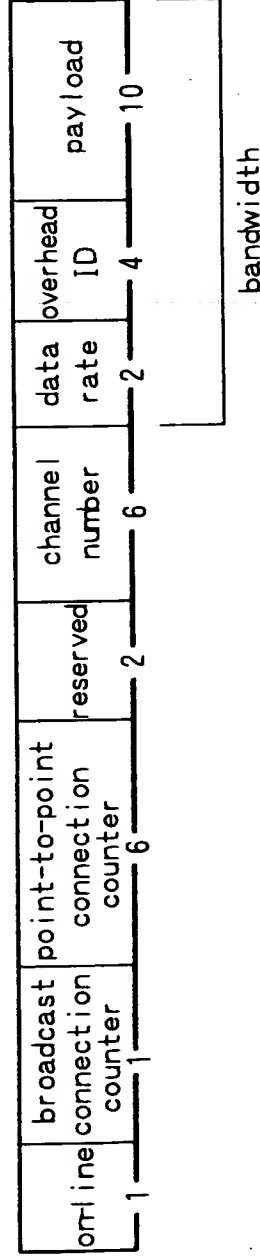
# FIG.14



# FIG.15A

## ● PLUG CONTROL REGISTER FOR OUTPUT

oPCR [n]



# FIG.15B

## ● PLUG CONTROL REGISTER FOR INPUT

iPCR [n]

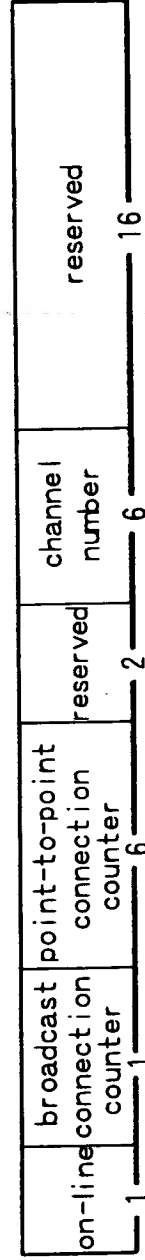
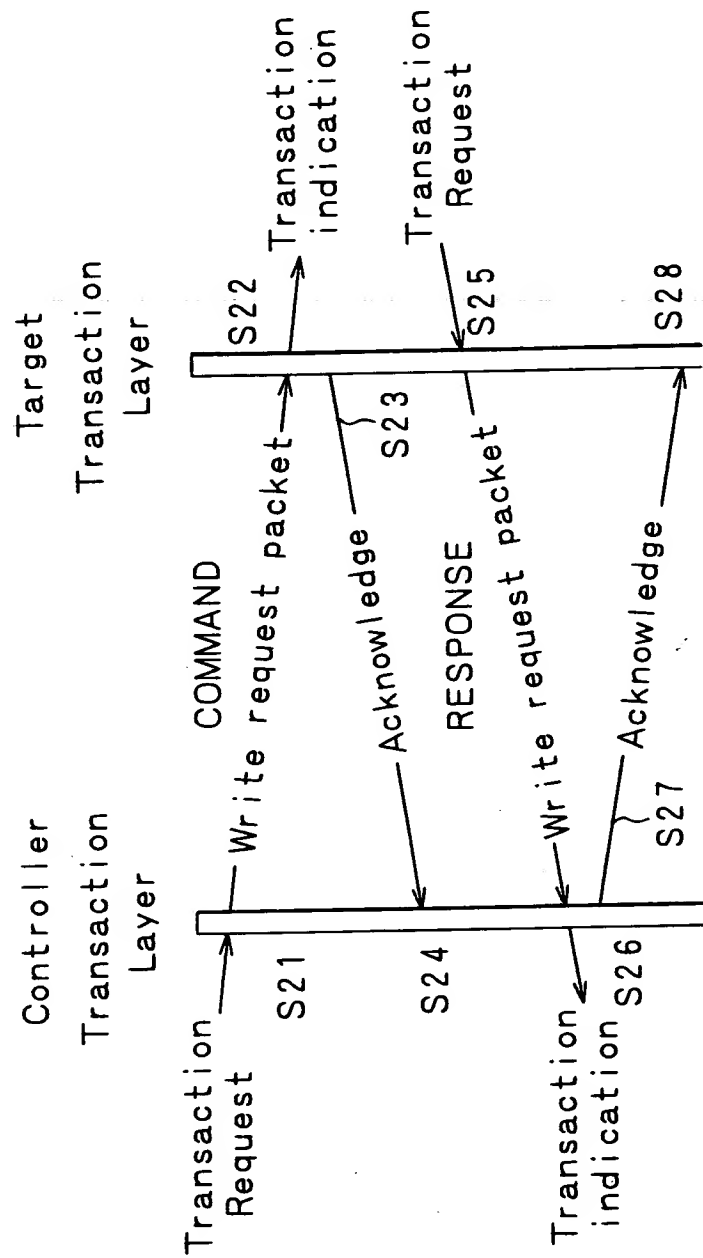
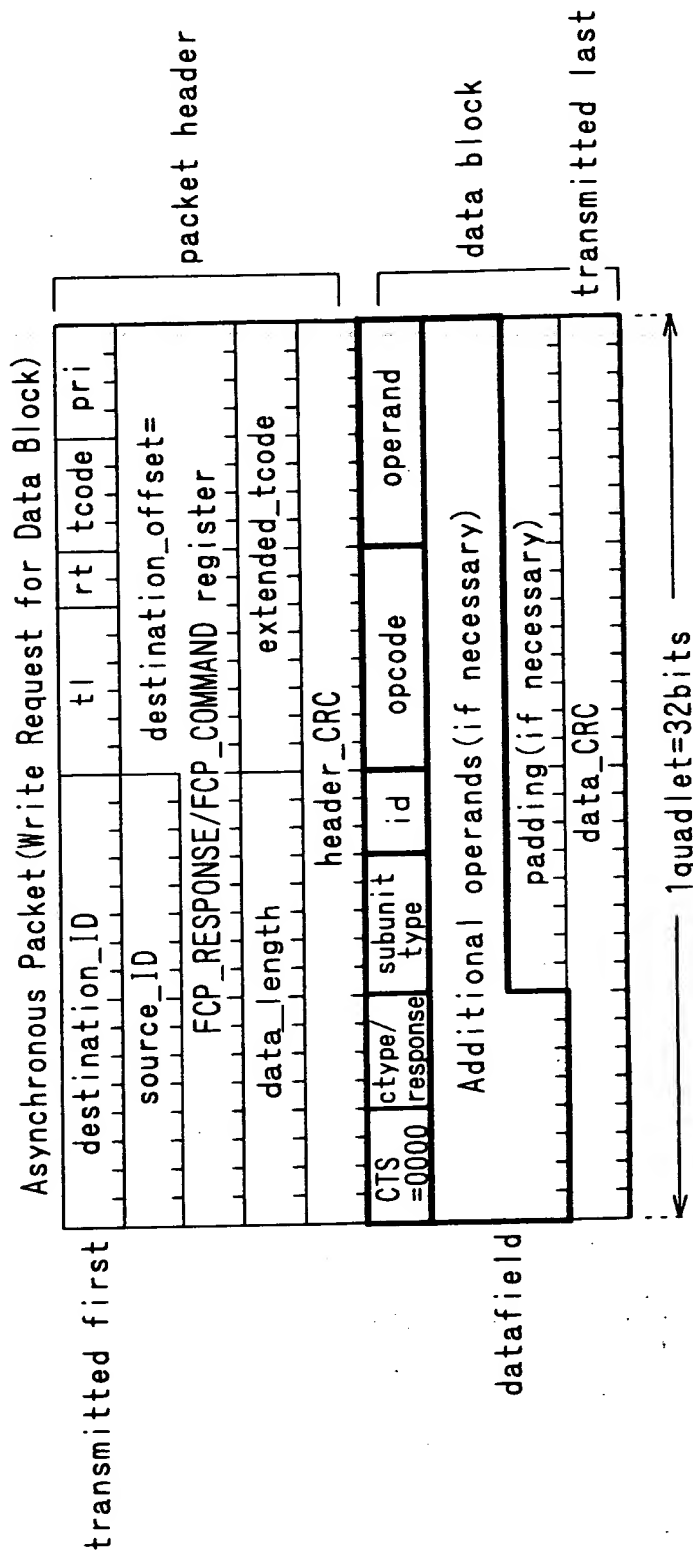


FIG.16





# FIG.17



CTS:COMMAND SET ID  
 ctype:COMMAND FUNCTION CLASSIFICATION  
 response:RESULT OF COMMAND PROCESSING  
 subunit type:ADDRESS FOR SPECIFYING INTRA-DEVICE FUNCTION  
 id:ADDRESS FOR IDENTIFYING THE SAME SUBUNIT TYPE  
 opcode:COMMAND  
 operand:COMMAND PARAMETER

# FIG.18

ctype/response

Command	0000	CONTROL
	0001	STATUS
	0010	INQUIRY
	0011	NOTIFY
	0100	
	}	(reserved)
Response	0111	
	1000	NOT IMPLEMENTED
	1001	ACCEPTED
	1010	REJECTED
	1011	IN TRANSITION
	1100	IMPLEMENTED/STABLE
	1101	CHANGED
	1110	(reserved)
	1111	INTERIM

# FIG.19A

subunit\_type

00000	Monitor
}	(reserved)
00011	Disc recorder/player
00100	VCR
00101	Tuner
00111	Camera
}	(reserved)
11111	Unit*

# FIG.19B

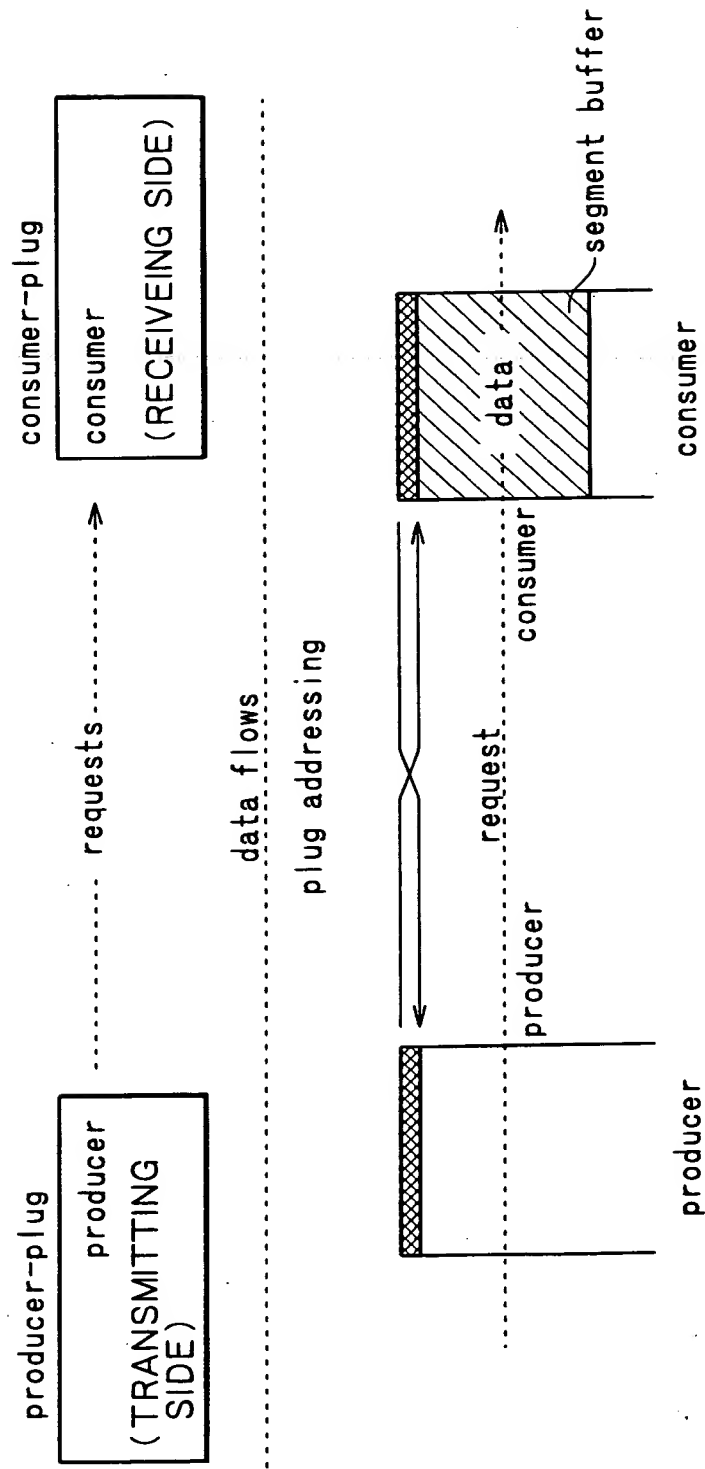
opcode:Operation Code

00h	VENDOR-DEPENDENT
50h	SEACH MODE
52h	ATN
60h	OPEN MIC
61h	READ MIC
62h	WRITE MIC
C1h	LOAD MEDIUM
C2h	RECORD
C3h	PLAY
C4h	WIND
}	}

\*AN OPCODE TABLE IS PROVIDED FOR EACH SUBUNIT

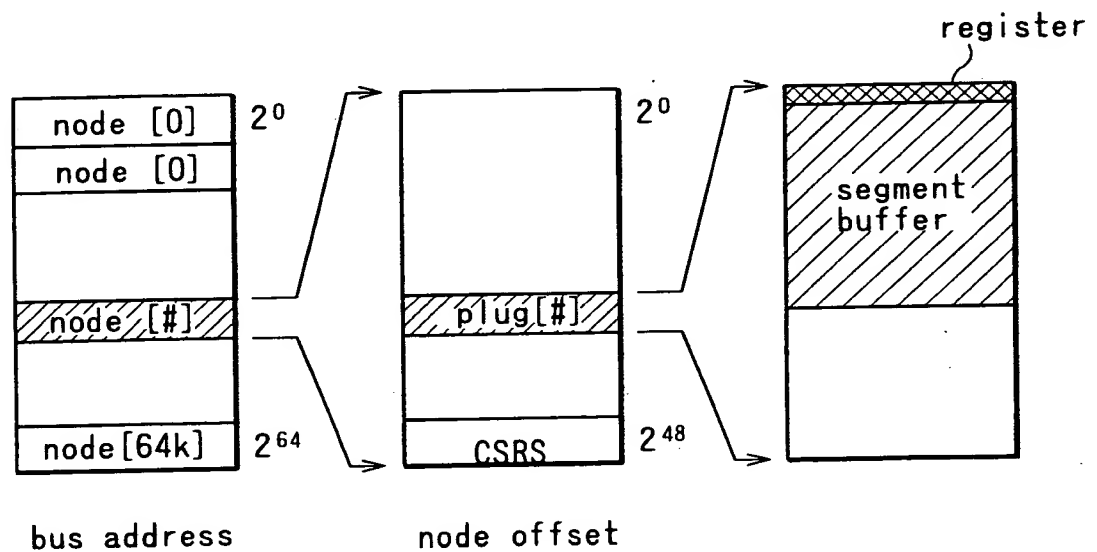
\*AN OPERAND IS DEFINED FOR EACH OPCODE

FIG. 20



Asynchronous plug structure

FIG.21A FIG.21B FIG.21C



Location of plug address spaces

FIG.22A FIG.22B

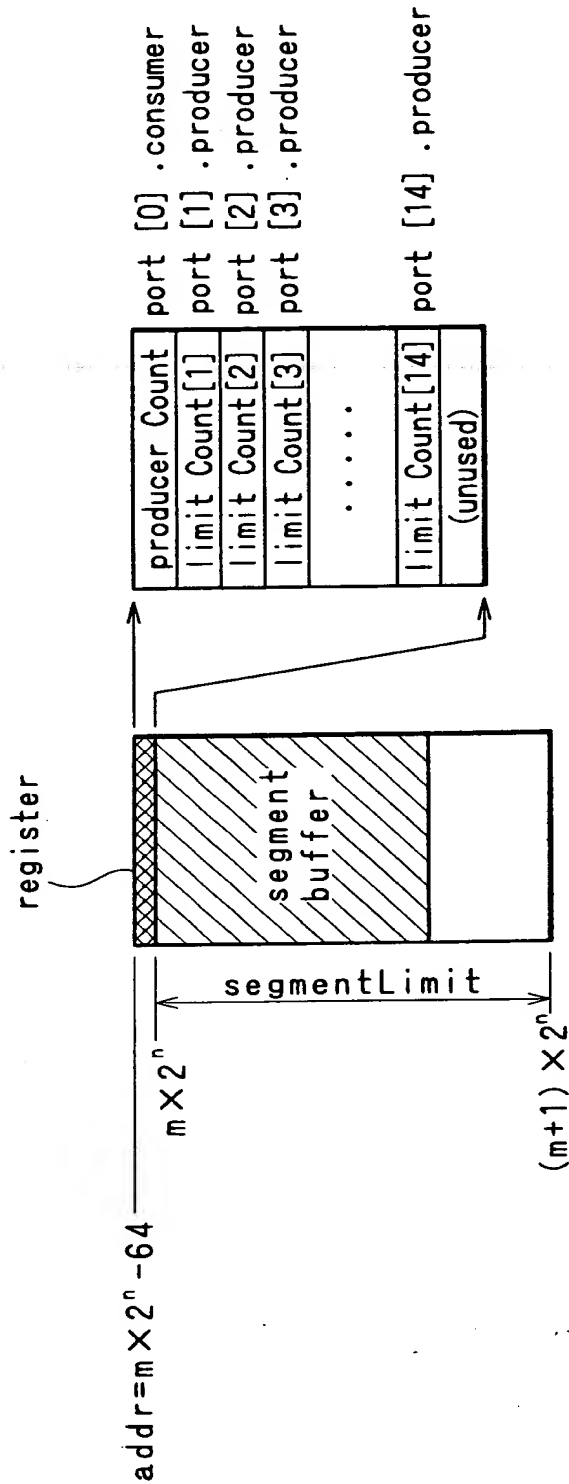


FIG.22C

Address offset	Description
0	consumer port
4	producer port [1]
8.12....52	producer port [2]-to-port [3]
56	port [14]
60	reserved
64	Segment buffer

pulug address space Components

# FIG. 23A

producer  
(TRANSMITTING SIDE)

producer Count
limit Count [1]
limit Count [2]
limit Count [3]
.....
limit Count [14]
segment buffer

producer Count  
WRITTEN



limit Count  
WRITTEN



segment buffer  
WRITTEN



# FIG. 23B

Consumer  
(RECEIVING SIDE)

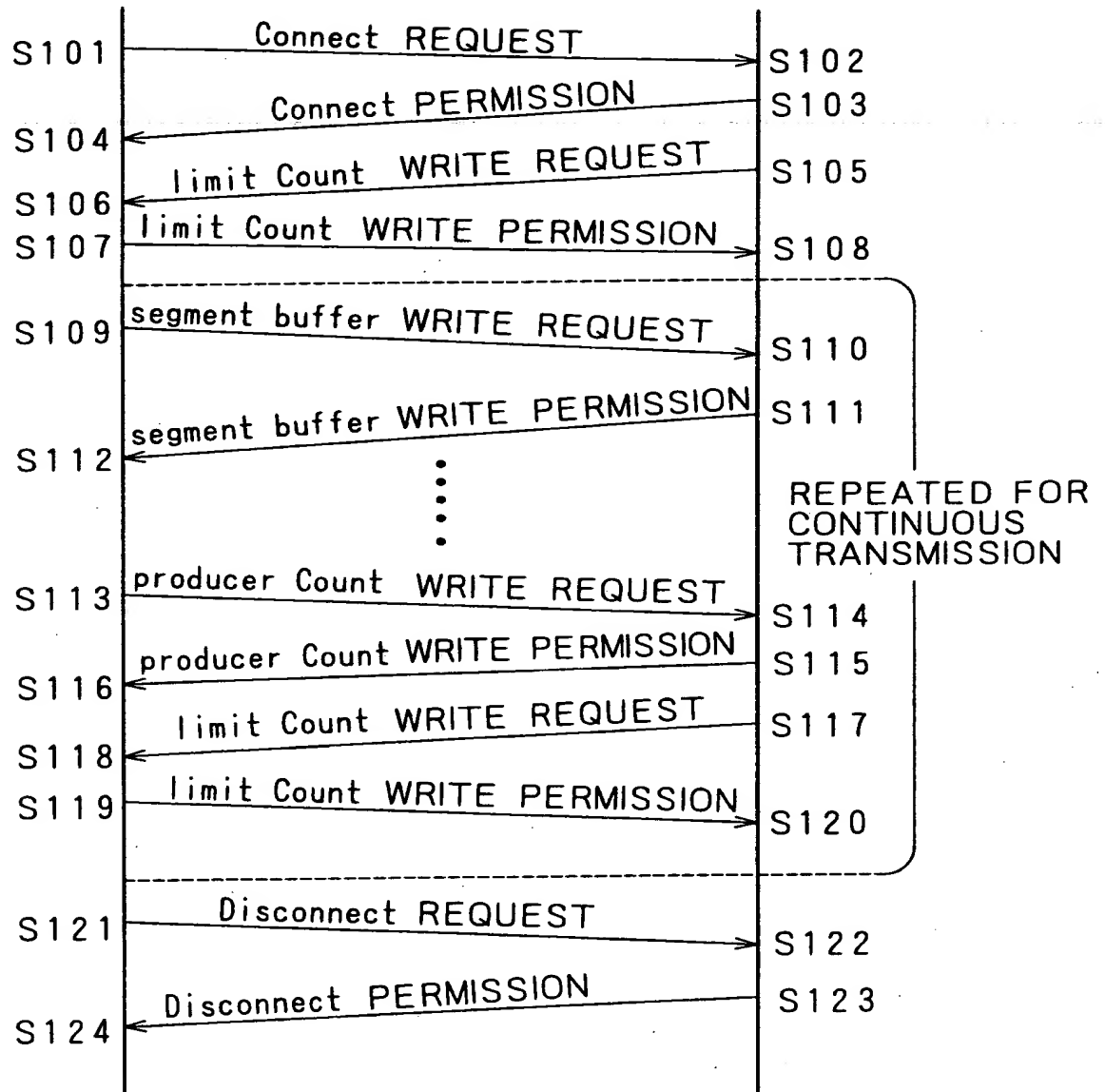
producer Count
limit Count [1]
limit Count [2]
limit Count [3]
.....
limit Count [14]
segment buffer

Asynchronous plug organization (2)

# FIG. 24

Producer:Controller  
(TRANSMITTING SIDE)

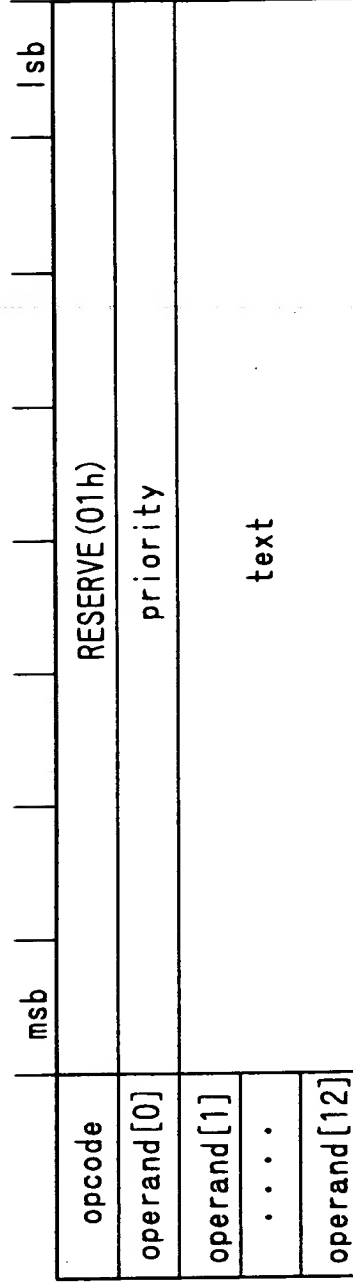
Consumer:Target  
(RECEIVING SIDE)



PROCEDURES FOR Asynchronous Connection  
TRANSMISSION AND RECEPTION

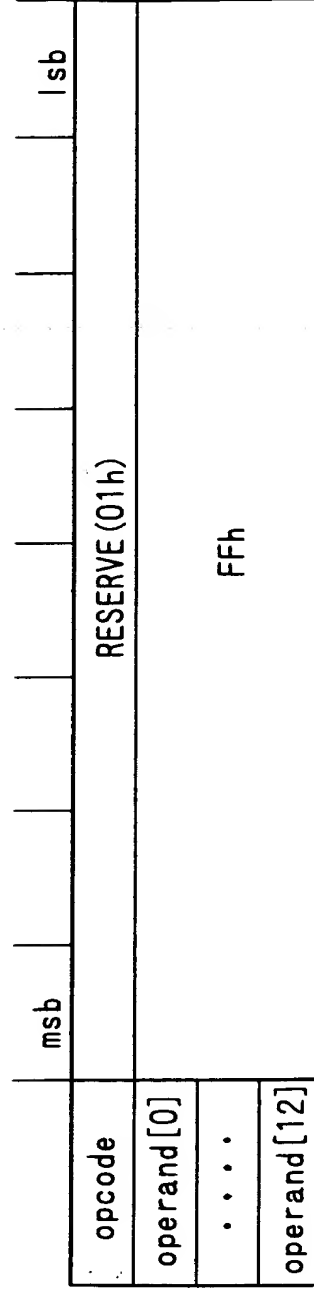


# FIG. 25



RESERVE control command

# FIG. 26



RESERVE status command

FIG. 27

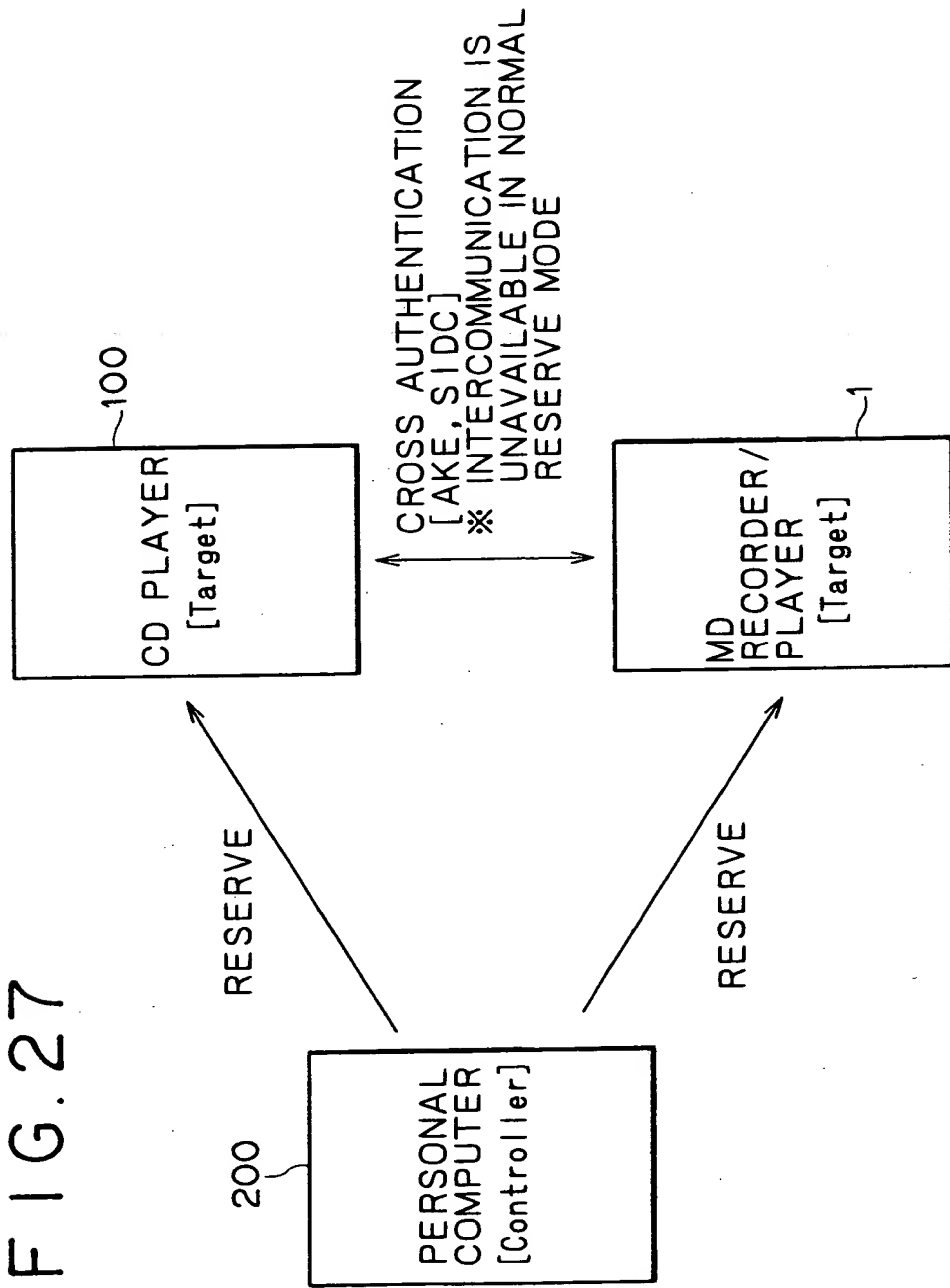
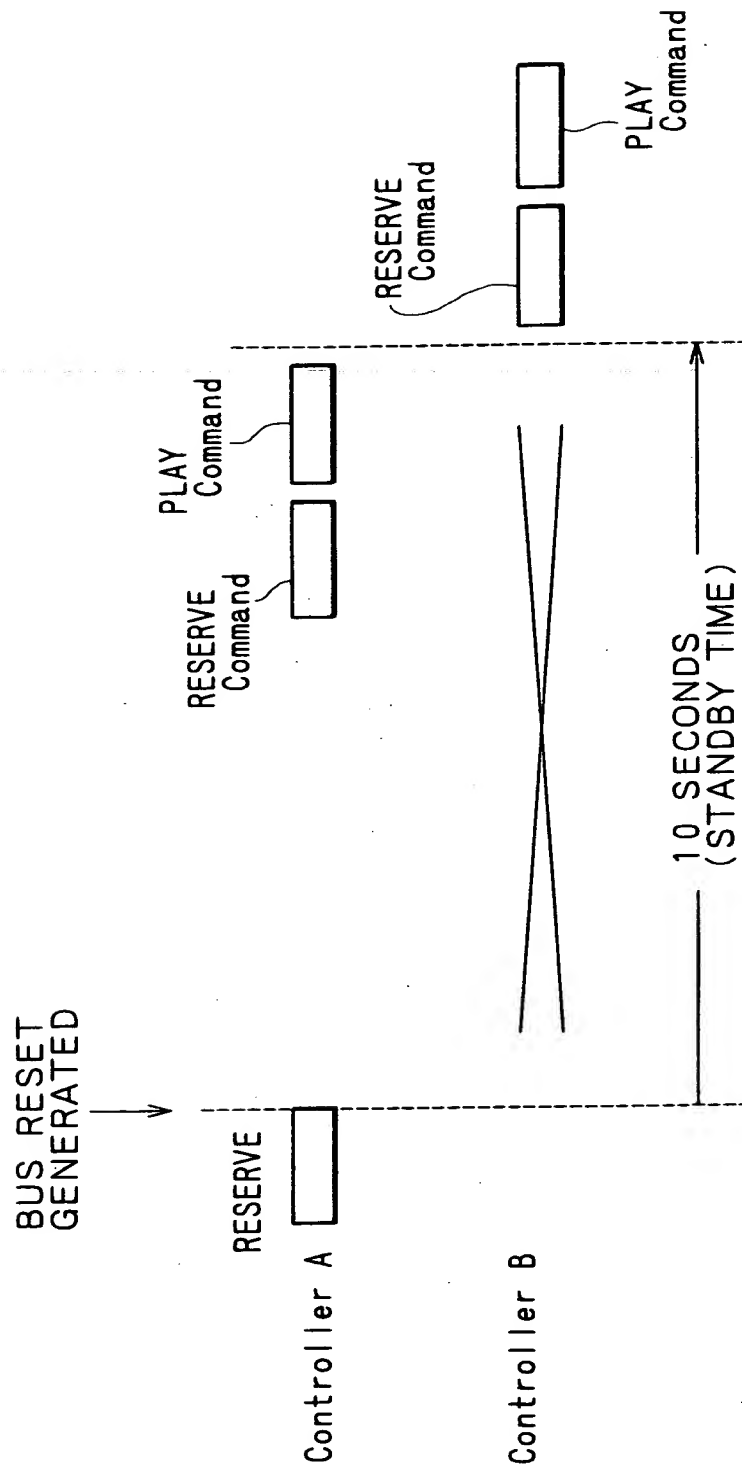


FIG. 28



# FIG. 29

	msb									lsb
operand	VENDOR-DEPENDENT(00h)									
operand [0]	(most significant byte)									
operand [1]	company_ID									
operand [2]	(least significant byte)									
operand [3]										
....										
operand [n]	vendor_dependent_data									

VENDOR-DEPENDENT command

# FIG.30

	msb							lsb
operand	VENDOR-DEPENDENT(00h)							
operand [0]	company_ID(08h) (00h) (46h)							
operand [1]								
operand [2]								
operand [3]	(F0h)							
operand [4]	(03h)							
operand [5]	(01h)							
operand [6]	(02h)							
operand [7]	MD-RESERVE(01h)							
operand [8]	priority							
operand [9]	text							
....								
operand [20]								

MD-RESERVE control/status command

FIG. 31

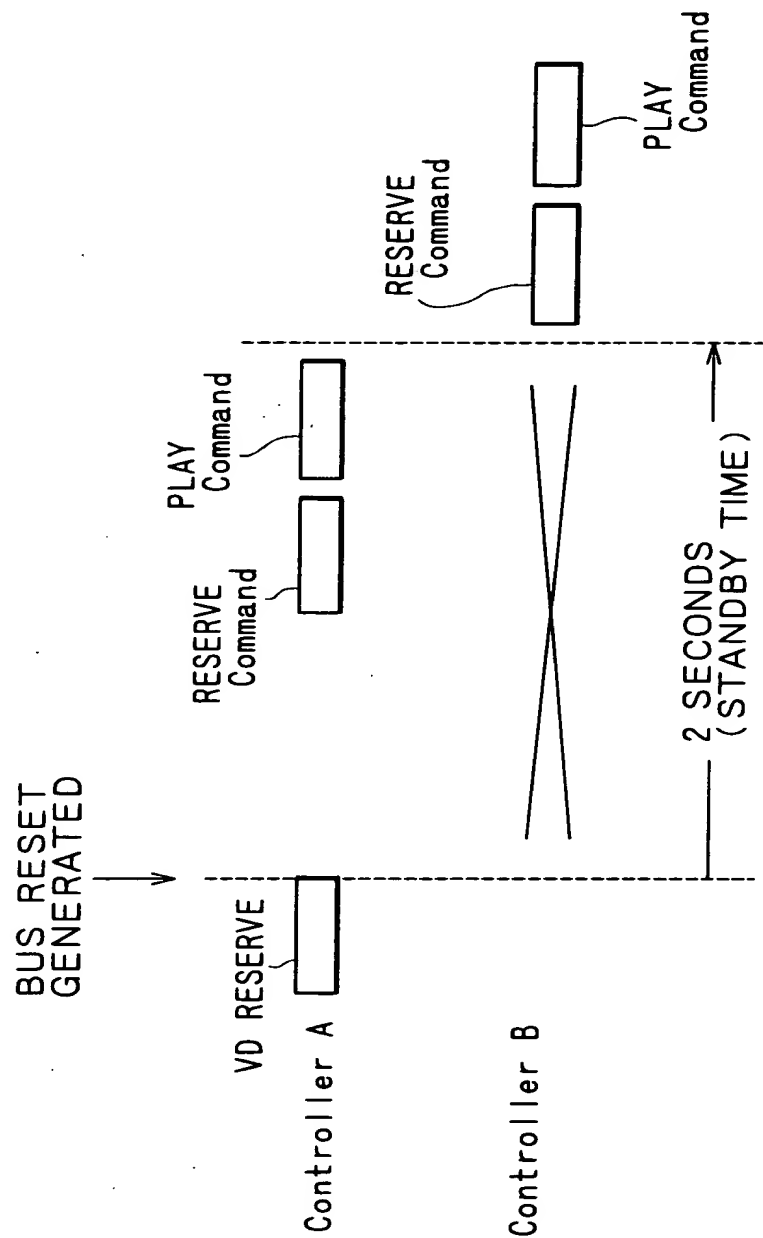


FIG. 32

